

REMARKS

Claims 54-57, 65, 66, 69-83, 85-87, 94-113, 115-120, 123-128, 131-135, 138-148, 150-155, 158-164, 170-173, 176-189, 191 and 196-200 are presently pending in this application. Claims 58 and 59 have been cancelled in this paper, and claim 69 has been amended to correct a clerical error. The undersigned representative would like to thank Examiner Koch for holding an extended teleconference on 10 January 2006. During this teleconference, the priority claim and the effective filing date of the claims were discussed. The applicants request that this paper constitute the applicants' Interview Summary of the January 10 teleconference.

The status of the application in light of the Office Action dated 30 November 2005 is as follows:

(A) The priority claim was subject to an objection on the grounds that the entire priority claim of U.S. Patent No. 5,235,995 ("Thompson '995 Patent") should be incorporated into the present application;

(B) Claims 54-59, 65, 66, 69-83, 85-87, 94-113, 115-120, 123-128, 131-135, 138-148, 150-155, 158-164, 170-173, 176-189, 191, 196 and 198-200 were rejected under 35 U.S.C. § 103 over the combination of U.S. Patent No. 5,168,887 issued to Thompson et al. ("Thompson '887 Patent") and U.S. Patent No. 4,590,094 issued to Ringer ("Ringer").

(C) Claim 197 was indicated as being allowable if rewritten in independent form.

A. **RESPONSE TO THE OBJECTION TO THE SPECIFICATION**

The priority claim was subject to an objection on the grounds that the Thompson '995 Patent appears to be a continuation or continuation-in-part of applications that are not referenced in the first line of the application. This objection, however, should be withdrawn because the present application does not claim priority to all of the branches of the priority claim in the Thompson '995 Patent.

The priority claim of the present application is as follows:

This application is a continuation of copending U.S. Patent Application Serial No. 09/575,965 filed May 23, 2000; which is a continuation of U.S. Patent Application Serial No. 08/883,393 filed June 26, 1997 (now U.S. Patent No. 6,066,575); which is a division of U.S. Patent Application Serial No. 08/422,485 filed April 12, 1995 (now U.S. Patent No. 5,658,387); which is a continuation-in-part of copending U.S. Patent Application Serial No. 07/855,767 filed March 18, 1992 (now U.S. Patent No. 5,431,421); which is a continuation-in-part of U.S. Patent Application Serial No. 07/665,942 filed March 6, 1991 (now U.S. Patent No. 5,235,995); which is a continuation-in-part of U.S. Patent Application Serial No. 07/526,243 (now U.S. Patent 5,168,887).

As such, the priority claim in the present case goes directly from U.S. Patent Application Serial No. 07/665,942 (now the Thompson '995 Patent) to U.S. Patent Application Serial No. 07/526,243 (now the Thompson '887 Patent). The direct priority claim between the Thompson '995 Patent and the Thompson '887 Patent in the present application is the same as the priority claim between the Thompson '995 and '887 Patents in the Thompson '995 Patent itself. The priority claim of the present application, therefore, is correct under 37 C.F.R. § 1.78 and M.P.E.P. § 201.11.

Although the Thompson '995 Patent also claims priority to separate and distinct branches of other applications or patents, neither 37 C.F.R. § 1.78 nor M.P.E.P. § 201.11 mandates that the present application must also claim priority to such separate and distinct priority branches. More specifically, the Thompson '995 Patent separately claims priority directly to each of the following U.S. Patent Application Nos.: 07/526,052 (Branch 1); 07/526,057 (Branch 2); 07/328,888 (Branch 3); 07/526,243 (Branch 4); and 07/464,101 (Branch 5). The present application claims priority only to the subject matter of Branch 4 of the priority claim in the Thompson '995 Patent. As such, the direct priority claim from the

Thompson '995 Patent to the Thompson '887 Patent in the present application is correct because this is the same direct priority claim in Branch 4 of the Thompson '995 Patent. To reiterate, neither 37 C.F.R. § 1.78 nor M.P.E.P. § 201.11 requires that the present application claim priority to separate priority branches. The fact that the Thompson '995 Patent claims other priorities that are separate and distinct from Branch 4 is irrelevant.

For further elucidation on the correctness of applicants' position, please consider that U.S. Application No. 07/464,101, now U.S. Patent No. 5,085,560, of Branch 5 of the Thompson '995 Patent describes subject matter that is not relevant to the subject matter claimed in the present application. To require that the present application claim priority to Branch 5 of the Thompson '995 Patent priority claim would result in an erroneous and incorrect result. Applicants accordingly submit that 37 C.F.R. § 1.78 and M.P.E.P. § 201.11 cannot be construed to require such a result, and respectfully request withdrawal of this objection.

B. RESPONSE TO SECTION 103 REJECTION

All of the pending claims except claim 197 were rejected under 35 U.S.C. § 103 over the combination of the Thompson '887 Patent and Ringer. This rejection was based on the assertion that the effective filing date for the claims is 12 April 1995 (the filing date of U.S. Application Serial No. 08/422,485 – now U.S. Patent No. 5,658,387). As discussed during the January 10 teleconference with respect to claim 54, this assertion is not correct because claim 54 is supported by the Thompson '887 Patent such that the effective filing date of claim 54 is 18 May 1990.

To assist the Examiner in evaluating the effective filing date for the claims, the support for independent claim 54 is set forth below. The structures identified below are provided as examples of the support for these claims, but other structures are included within the scope and meaning of the claims. Therefore, the claims are not limited to the specific structures noted below with respect to each individual example.

Claim 54 is directed toward an apparatus for processing a single wafer that includes a framework and a processing bowl mounted to the framework. Support for the framework is found at, among other places, Figures 1 and 9-11, and the text at column 2, lines 55-60, and column 7, line 63, to column 8, line 19, of the Thompson '887 Patent. Examples of processing bowls that have an inner portion with an interior adapted to receive a pool of processing chemical, an outer portion, and a fluid-receiving space between the inner portion and the outer portion are found at, for example, Figure 1 and the text at column 6, line 29, to column 7, line 16, of the Thompson '887 Patent.

Claim 54 further includes a chemical supply adapted to supply the processing chemical to the processing bowl. This feature of claim 54 is supported at, for example, the abstract and the text at column 2, lines 55-60, of the Thompson '887 Patent. More specifically, the Thompson '887 Patent discloses "a processing cabinet housing chemical cells and supplies of liquids and gases required during a specified process for the wafer." The term "chemical supply" is supported by the description of a "cabinet housing supplies of liquids and gases." Additionally, because such liquids and gases in the cabinet are available "during a specified process for the wafer," the supplies of the liquids and gases are accordingly "adapted" to be supplied to the processing cells (i.e., the processing bowls). Therefore, there is full support for this feature in the Thompson '887 Patent.

Claim 54 further recites a processor head mounted for movement between at least one loading position and at least one processing position. The head carries a rotatable wafer support, and a portion of the head extends radially outward over and along an upper edge of the bowl. This feature is supported at, for example, Figure 1 and the text at column 3, line 7, to column 6, line 28, of the Thompson '887 Patent.

Claim 54 further includes a second processing chamber and a wafer transfer adapted to move wafers to and from the processing bowl and/or the second processing chamber. The second processing chamber is supported at, for example, Figure 9 and the text at column 7, line 63, to column 8, line 2, of the Thompson '887 Patent. The wafer

transfer mechanism is supported at, for example, Figures 9-11 and the text at column 8, lines 3-19, of the Thompson '887 Patent.

Based on the foregoing, all of the features of claim 54 are supported by the Thompson '887 Patent, and thus this claim is entitled to an effective filing date of 18 May 1990. The Thompson '887 Patent accordingly does not qualify as prior art under Section 102 to claim 54. Therefore, the Section 103 rejection of claim 54 over the combination of the Thompson '887 Patent and Ringer should be withdrawn.

In addition to being supported by the Thompson '887 Patent, claim 54 is also supported by the Thompson '995 Patent. First, claim 54 is supported by the Thompson '995 Patent because the Thompson '995 Patent incorporates the Thompson '887 Patent by reference. The Thompson '995 Patent also supports claim 54 because the features of claim 54 are also found in the written description of the Thompson '995 Patent as follows:

- (a) framework – Figures 3 to 6 and the text at column 11, lines 27-33;
- (b) processing bowl – Figure 7 and the text at column 15, line 64, to column 16, line 66;
- (c) chemical supply – Figures 24 and 26, and the text at column 21, line 41, to column 24, line 18;
- (d) processor head – Figure 7 and the text at column 13, line 13, to column 15, line 63;
- (e) second processing chamber – incorporation from the Thompson '887 Patent; and
- (f) wafer transfer – Figures 3 to 6 and the text at column 12, lines 16-43.

Based on the foregoing, claim 54 is entitled to the 18 May 1990 filing date of the Thompson '887 Patent, or in no case a date later than the 6 March 1991 filing date of the

Thompson '995 Patent. As such, at worst case, the Thompson '887 Patent qualifies as prior art to claim 54 only under Section 102(e). Claim 54, therefore, should not be rejected under 35 U.S.C. § 103 because the present application, the Thompson '995 Patent, and the Thompson '887 Patent were all assigned or under an obligation to be assigned to Semitool, Inc. when the present application was filed.

Support for dependent claims 55-57, 65 and 66 is also found in both the Thompson '887 Patent and the Thompson '995 Patent. Claims 55-57, 65 and 66 are directed toward aspects of the processor head, wafer support, or a drain. Figure 7 of the Thompson '995 Patent and Figure 1 of the Thompson '887 Patent, for example, show that the wafer support extends below an upper edge of the processing bowl during processing. Additionally, Figure 7 of the Thompson '995 Patent and Figure 1 of the Thompson '887 Patent disclose a drain. Figures 15-19 of the Thompson '995 Patent and Figures 12-15 of the Thompson '887 Patent disclose a vertically moving processor head. Therefore, the rejection of claims 55-57, 65 and 66 under Section 103 over the combination of the Thompson '887 Patent and Ringer should also be withdrawn.

Claim 72-74 are directed to additional aspects of the wafer support that are fully supported by both the Thompson '995 Patent and the Thompson '887 Patent. Referring to Figure 7 of the Thompson '995 Patent and Figure 1 of the Thompson '887 Patent, both of these patents disclose a wafer support having a support plate as set forth in claim 72 and a plurality of fingers as set forth in claims 73 and 74. Therefore, the rejection of claims 72-74 under Section 103 over the combination of the Thompson '887 Patent and Ringer should also be withdrawn.

Claims 69-71 and 75-83 are fully supported at least by the Thompson '995 Patent. The various rpm ranges for rotating the wafer support and materials for acidic processing are disclosed in the Thompson '995 Patent. Therefore, the rejection of claims 69-71 and 75-83 under Section 103 over the combination of the Thompson '887 Patent and Ringer should also be withdrawn.

The remaining claims in the application have subject matter that is similar or otherwise analogous to the subject matter set forth in claims 54-57, 65, 66 and 69-83. Therefore, for the reasons explained above, the rejection of claims 85-87, 94-113, 115-120, 123-128, 131-135, 138-148, 150-155, 158-164, 170-173, 176-189, 191-196 and 198-200 under Section 103 over the combination of the Thompson '887 Patent and Ringer should also be withdrawn.

C. ALLOWED SUBJECT MATTER

The applicants wish to thank the Examiner for indicating that claim 197 is allowable. Claim 197, however, has not been amended in this paper because it depends from allowable claim 115. Therefore, the objection to claim 197 should be withdrawn.

D. CONCLUSION

In view of the foregoing, the pending claims comply with 35 U.S.C. § 112 and are patentable over the cited art. The applicants accordingly request reconsideration of the application and a Notice of Allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned representative at (206) 359-3258.

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Respectfully submitted,

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